LISTING OF THE CLAIMS

Please replace the claims as filed with the claims set forth below. This listing of claims will replace all prior versions, and listings, of claims in the application:

1-47. (Cancelled)

48. (Previously Presented) A method for generating an aerosol comprising the steps of:

(a) heating a physiologically active compound to vaporize at least a portion of the compound;

(b) cooling the resulting vapor by mixing the vapor with a gas in a predetermined ratio, selected to form an aerosol comprised of particles within a desired size range when a stable concentration of particles in the gas is reached.

49-123. (Canceled)

124. (Previously Presented) A method for generating an aerosol comprising the steps of:

(a) heating a coating comprising a physiologically active compound, deposited onto a metal screen, by passing a current across the metal screen to vaporize at least a portion of the compound; and

(b) simultaneously passing a gas through the metal screen thereby mixing the resulting vapor with the gas in a predetermined ratio, selected to form an aerosol comprised of particles within a desired size range when a stable concentration of particles in the gas is reached.

125. (Previously Presented) The method of claim 124 wherein the metal is stainless steel.

126. (Previously Presented) The method of claim 125 wherein the screen is 200 mesh.

127. (Previously Presented) The method of claim 124 wherein the screen is 200 mesh.

128. (Previously Presented) The method of claim 124 wherein the current is supplied by discharging a capacitor.

129. (Previously Presented) The method of claim 124 wherein the current is passed across the screen for less than about 20 milliseconds.

130. (Previously Presented) The method of claim 124 further comprising administering the resulting aerosol to a patient.

131-183. (Canceled)

184. (Previously Presented) The method of claim 48 further comprising the step of depositing a coating comprising the compound onto a substrate before step (a).

185. (Previously Presented) The method of claim 184 wherein the depositing a coating comprises dissolving the compound in an organic solvent, applying the solution to all or a portion of the substrate and allowing the solvent to evaporate.

186. (Previously Presented) The method of claim 48 wherein the desired size range is a mass median aerodynamic diameter between about 1 to 3 microns.

187. (Previously Presented) The method of claim 48 wherein the desired size range is a mass median aerodynamic diameter between about 10 to 100 nanometers.

188. (Previously Presented) The method of claim 48 wherein the gas is air.

189. (Previously Presented) The method of claim 48 wherein the compound is selected from the group consisting of cannabinoid extracts from cannabis, THC, ketorolac, fentanyl, morphine, testosterone, ibuprofen, codeine, nicotine, Vitamin A, Vitamin E acetate, Vitamin E,

nitroglycerin, pilocarpine, mescaline, testosterone enanthate, menthol, phencaramide, methsuximide, eptastigmine, promethazine, procaine, retinol, lidocaine, trimeprazine, isosorbide dinitrate, timolol, methyprylon, etamiphyllin, propoxyphene, salmetrol, vitamin E succinate, methadone, oxprenolol, isoproterenol bitartrate, etaqualone, Vitamin D3, ethambutol, ritodrine, omoconazole, cocaine, lomustine, ketamine, ketoprofen, cilazaprol, propranolol, sufentanil, metaproterenol, pentoxapylline, captopril, loxapine, cyproheptidine, carvediol, trihexylphenadine, alprostadil, melatonin, testosterone proprionate, valproic acid, acebutolol, terbutaline, diazepam, topiramate, pentobarbital, alfentanil HCl, papaverine, nicergoline, fluconazole, zafirlukast, testosterone acetate, droperidol, atenolol, metoclopramide, enalapril, albuterol, ketotifen, isoproterenol, amidarone HCl, zileuton, midazolam, oxycodone, cilostazol, propofol, nabilone, gabapentin, famotidine, lorezepam, naltrexone, acetaminophen, sumatriptan, bitolterol, nifedipine, phenobarbital, phentolamine, 13-cis retinoic acid, droprenilamine HCl, amlodipine, caffeine, zopiclone, tramadol HCl, pirbuterol, naloxone, meperidine HCl, trimethobenzamide, nalmefene, scopolamine, sildenafil, carbamazepine, procaterol HCl, methysergide, glutathione, olanzapine, zolpidem, levorphanol, buspirone and mixtures thereof.

190. (Previously Presented) The method of claim 48 wherein an inhalation dose of the compound is vaporized over a period of time no greater than about 2 seconds.

191. (Previously Presented) The method of claim 48 wherein the mixing comprises passing the gas across the surface of the coating.

192-197. (Cancelled)

198. (Previously Presented) The method of claim 48 further comprising administering the resulting aerosol to a patient.

199. (Previously Presented) A method for generating an aerosol comprising the steps of:

(a) heating a coating comprising a therapeutic amount of a physiologically active compound deposited onto a substrate to vaporize at least a portion of the compound;

(b) cooling the resulting vapor by mixing the vapor with a gas in a predetermined ratio, selected to form an aerosol comprised of particles within a desired size range when a stable concentration of particles in the gas is reached.

200-203. (Cancelled)

204. (Previously Presented) The method of claim 199 wherein the desired size range is a mass median aerodynamic diameter between about 1 to 3 microns.

205. (Previously Presented) The method of claim 199 wherein the desired size range is a mass median aerodynamic diameter between about 10 to 100 nanometers.

206. (Previously Presented) The method of claim 199 wherein the gas is air.

207. (Previously Presented) The method of claim 199 wherein an inhalation dose of the compound is vaporized over a period of time no greater than about 2 seconds.

208. (Previously Presented) The method of claim 199 wherein the mixing comprises passing the gas across the surface of the coating.

209. (Previously Presented) The method of claim 199 further comprising administering the resulting aerosol to a patient.

210. (Previously Presented) The method of claim 48 wherein the stable concentration is about 10^9 particles/cc.

211. (Previously Presented) The method of claim 124 wherein the stable concentration is about 10^9 particles/cc.

212. (Previously Presented) The method of claim 199 wherein the stable concentration is about 10^9 particles/cc.

213. (Previously Presented) A method for generating an aerosol comprising the steps of:

(a) heating a physiologically active compound to vaporize at least a portion of the compound;

(b) cooling the resulting vapor by mixing the vapor with a gas in a predetermined ratio, selected to form an aerosol comprised of particles within a desired size range that are sufficiently stable that they will remain within that range during the time necessary to administer the aerosol to a patient.

214. (Previously Presented) The method of claim 213 further comprising the step of depositing a coating comprising the compound onto a substrate before step (a).

215. (Previously Presented) The method of claim 214 wherein the depositing a coating comprises dissolving the compound in an organic solvent, applying the solution to all or a portion of the substrate and allowing the solvent to evaporate.

216. (Previously Presented) The method of claim 213 wherein the desired size range is a mass median aerodynamic diameter between about 1 to 3 microns.

217. (Previously Presented) The method of claim 213 wherein the desired size range is a mass median aerodynamic diameter between about 10 to 100 nanometers.

218. (Previously Presented) The method of claim 213 wherein the gas is air.

219. (Previously Presented) The method of claim 213 wherein the compound is selected from the group consisting of cannabinoid extracts from cannabis, THC, ketorolac, fentanyl, morphine, testosterone, ibuprofen, codeine, nicotine, Vitamin A, Vitamin E acetate, Vitamin E, nitroglycerin, pilocarpine, mescaline, testosterone enanthate, menthol, phencaramide, methsuximide, eptastigmine, promethazine, procaine, retinol, lidocaine, trimeprazine, isosorbide dinitrate, timolol, methyprylon, etamiphyllin, propoxyphene, salmetrol, vitamin E succinate,

methadone, oxprenolol, isoproterenol bitartrate, etaqualone, Vitamin D3, ethambutol, ritodrine, omoconazole, cocaine, lomustine, ketamine, ketoprofen, cilazaprol, propranolol, sufentanil, metaproterenol, pentoxapylline, captopril, loxapine, cyproheptidine, carvediol, trihexylphenadine, alprostadil, melatonin, testosterone proprionate, valproic acid, acebutolol, terbutaline, diazepam, topiramate, pentobarbital, alfentanil HCl, papaverine, nicergoline, fluconazole, zafirlukast, testosterone acetate, droperidol, atenolol, metoclopramide, enalapril, albuterol, ketotifen, isoproterenol, amidarone HCl, zileuton, midazolam, oxycodone, cilostazol, propofol, nabilone, gabapentin, famotidine, lorezepam, naltrexone, acetaminophen, sumatriptan, bitolterol, nifedipine, phenobarbital, phentolamine, 13-cis retinoic acid, droprenilamine HCl, amlodipine, caffeine, zopiclone, tramadol HCl, pirbuterol, naloxone, meperidine HCl, trimethobenzamide, nalmefene, scopolamine, sildenafil, carbamazepine, procaterol HCl, methysergide, glutathione, olanzapine, zolpidem, levorphanol, buspirone and mixtures thereof.

220. (Previously Presented) The method of claim 213 wherein an inhalation dose of the compound is vaporized over a period of time no greater than about 2 seconds.

221. (Previously Presented) The method of claim 213 wherein the mixing comprises passing the gas across the surface of the coating.

222. (Previously Presented) The method of claim 213 further comprising administering the resulting aerosol to a patient.

223. (Previously Presented) A method for generating an aerosol comprising the steps of:

(a) heating a coating comprising a therapeutic amount of a physiologically active compound deposited onto a substrate to vaporize at least a portion of the compound;

(b) cooling the resulting vapor by mixing the vapor with a gas in a predetermined ratio, selected to form an aerosol comprised of particles within a desired size range that are sufficiently stable that they will remain within that range during the time necessary to administer the aerosol to a patient.

224. (Previously Presented) The method of claim 223 wherein the particle size is a mass median aerodynamic diameter between about 1 to 3 microns.

225. (Previously Presented) The method of claim 223 wherein the particle size is a mass median aerodynamic diameter between about 10 to 100 nanometers.

226. (Previously Presented) The method of claim 223 wherein the gas is air.

227. (Previously Presented) The method of claim 223 wherein an inhalation dose of the compound is vaporized over a period of time no greater than about 2 seconds.

228. (Previously Presented) The method of claim 223 wherein the mixing comprises passing the gas across the surface of the coating.

229. (Previously Presented) The method of claim 223 further comprising administering the resulting aerosol to a patient.